

(19) World Intellectual Property
Organization
International Bureau



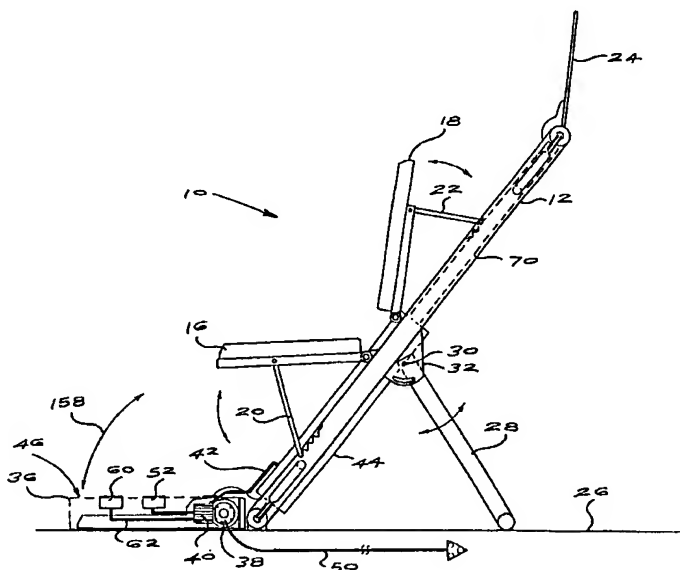
(43) International Publication Date
29 July 2004 (29.07.2004)

PCT

(10) International Publication Number
WO 2004/062743 A1

- (51) International Patent Classification⁷: **A63B 23/035**, 21/002, 21/008, F16F 9/02
- (74) Agents: MCCALLUM RADEMEYER & FREIMOND et al.; 7 June Avenue, P.O. Box 1130, 2125 Randburg (ZA).
- (21) International Application Number:
PCT/ZA2003/000155
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 20 October 2003 (20.10.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
03/0392 15 January 2003 (15.01.2003) ZA
10/611,984 3 July 2003 (03.07.2003) US
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (71) Applicant (*for all designated States except US*): GREENHOUSE INTERNATIONAL LLC [US/US]; 2408 Pebble Beach Drive, Elkton, MD 21921 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): VAN STRAATEN, Willem, Johannes [ZA/ZA]; 130 Trafalgar Place Street, Sandhurst, 2196 Sandton (ZA). PUZEY, Michael, Roydon [ZA/ZA]; 7 Hans Schoeman Street, Malanshof, 2194 Randburg (ZA).
- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: EXERCISE MACHINE



(57) Abstract: An exercise machine which includes an elongate frame (12) which forms an enclosure, a resistance assembly (44, 70, 160A, 160B, 160C, 260, 266) located at least partly in the enclosure, a support member (28) for supporting the frame at an inclined position with an upwardly facing front side and a downwardly facing rear side, a seat (16) extending from the front side of the frame at a location at which part of the frame opposes a back of a user seated on the seat, and at least a first actuator (88A, 88B, 108A, 108B, 412, 428) which is movable by the user against a first resistance force which is generated by the resistance assembly.

INTERNATIONAL SEARCH REPORT

PCT/ZA 03/00155

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 A63B23/035 A63B21/002 A63B21/008 F16F9/02		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 A63B F16F		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 403 257 A (LEHTONEN KARI) 4 April 1995 (1995-04-04) column 2, line 49 - column 3, line 37; figures 1,2	1-19, 32-47
Y	---	20-31, 48-57
X	EP 0 614 683 A (B H SA) 14 September 1994 (1994-09-14) the whole document	1-19, 32-47
X	US 5 709 638 A (MACKERT ROSS A ET AL) 20 January 1998 (1998-01-20) column 3, line 8 - column 4, line 65 column 6, line 7 - line 47; figures 1-3,7,9	1-15,46
	--- -/--	
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
* Special categories of cited documents : *A* document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published prior to the international filing date but later than the priority date claimed *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *&* document member of the same patent family		
Date of the actual completion of the international search 10 March 2004		Date of mailing of the international search report 26/03/2004
Name and mailing address of the ISA European Patent Office, P.B. 5618 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax (+31-70) 340-3016		Authorized officer Fischer, E

Form PCT/ISA/210 (second sheet) (July 1992)

INTERNATIONAL SEARCH REPORT

PCT/ZA 03/00155

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 1 260 249 A (MULTI FORM) 27 November 2002 (2002-11-27) paragraph '0008! - paragraph '0016! paragraph '0030! - paragraph '0034! paragraph '0039! - paragraph '0040! figures	20-31, 48-57
A	GB 650 009 A (PAUL FRANCOIS GALLERET) 7 February 1951 (1951-02-07) the whole document	23,48, 49,52-56
A	GB 2 076 665 A (HORNG MEEI SPRING) 9 December 1981 (1981-12-09) page 1, line 30 - line 48 page 1, line 94 - line 109; figures 3,4	23,48, 49,52-56
A	US 4 826 156 A (DREIER BEAT) 2 May 1989 (1989-05-02) column 1, line 8 - line 28; figures	24,49-53
A	FR 2 686 259 A (THEROND LEON) 23 July 1993 (1993-07-23) page 1, line 32 -page 2, line 30 page 5, line 10 -page 6, line 21; figures 1,2	23,48, 49,52-56

INTERNATIONAL SEARCH REPORT

Information on patent family members

PCT/ZA 03/00155

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5403257	A	04-04-1995	FI 900597 A DE 4101803 A1 GB 2240727 A , B	08-08-1991 08-08-1991 14-08-1991
EP 0614683	A	14-09-1994	ES 2064263 A2 EP 0614683 A1	16-01-1995 14-09-1994
US 5709638	A	20-01-1998	NONE	
EP 1260249	A	27-11-2002	FR 2824741 A1 EP 1260249 A1	22-11-2002 27-11-2002
GB 650009	A	07-02-1951	NONE	
GB 2076665	A	09-12-1981	HK 95884 A MY 86285 A SG 72184 G US 4333645 A	14-12-1984 31-12-1985 29-03-1985 08-06-1982
US 4826156	A	02-05-1989	CH 668193 A5 AT 46448 T AU 7230387 A WO 8706482 A1 DE 3760571 D1 EP 0268596 A1 JP 1500167 T	15-12-1988 15-10-1989 24-11-1987 05-11-1987 26-10-1989 01-06-1988 26-01-1989
FR 2686259	A	23-07-1993	FR 2686259 A1 AU 3502993 A EP 0624108 A1 WO 9314822 A1	23-07-1993 01-09-1993 17-11-1994 05-08-1993

Form PCT/ISA/210 (patent family annex) (July 1992)